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MEMORANDUM
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OFFICE OF SECRETARY

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DOCKET FILE COPY ORIGINAL

Date: May 31, 1996

To: Secretary, FCC

From: Robert F. Cleveland, Office of Engineering & Technology

Subject: Ex Parte Submission
ET Docket 93-62
"Guidelines for Evaluating the Environmental Effects of Radiofrequency
Radiation"

The enclosed letter and attachment from Dr. Don Justesen, dated May 23, 1996, is relevant to the above-referenced docket on FCC adoption of radiofrequency radiation exposure guidelines (ET Docket 93-62). Please place this memorandum and enclosure in the record of this proceeding as an ex parte filing. Three copies are enclosed for your convenience.

Enclosures

No. of Copies rec'd 022
List ABCDE

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23 May 1996

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JUN 3 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Dr. Robert F. Cleveland, Jr.
Office of Engineering & Technology
Federal Communications Commission
2000 M Street, NW
District of Columbia, 20554

DOCKET FILE COPY ORIGINAL

Dear Bob:

Monday before last I was in Bethesda, Maryland, to participate in a meeting of Scientific Committee 89.4 of the NCRP. During the course of the meeting my colleagues and I viewed a copy of an unsigned letter on an IEEE (SCC 28) letterhead, which was dated 11 March 1996, and as I understand, was directed to your office.

The letter is vexing, on three counts:

1. Unsigned, there is no accountability of authorship; the reader--you, or your confreres at the FCC, or anyone else who reads it--is left to conjecture whether the contents of the letter reflect the views of any or all of the 13 committee members whose names appear on cover. As two of the members of SCC-28 were present at the NCRP meeting, Drs. Om Gandhi and John D'Andrea, I asked them whether their opinions had been solicited in the composition of the unsigned letter. Neither member had been consulted.

2. The letter purportedly compares IEEE SCC-28 and NCRP as RF-standard-setting entities. The crux of the comparison is essentially a "good-guys, bad-guys" harangue in which the bad guys are the NCRP. As I have been intimately involved in RF standard-setting activities of the IEEE and the NCRP for two decades, I can vouch for the integrity, expertness, and utility of both organizations: Each has its particular strengths and virtues, and, in the combination, these serve on balance to enhance and complement the RF standard-setting process as exemplified by the recognition and acceptance that both have received on an international scale. This complementarity notwithstanding, the author of the unsigned letter appears to be poorly informed about the NCRP, about its scientific committees and how they are selected, how they perform their evaluative works, and how they are subjected to stringent oversight. He or she seems also to be unaware that at least six of the current members of IEEE's SCC-28 are past or present members of NCRP scientific committees!

3. To the end of rectifying misconception, I'm sending a copy of this letter to Dr. John Osepchuk, Chairman of IEEE's SCC-28, that he may effect controls over the use of IEEE letterhead in unsigned documents that argue policy and positions. It is the clandestine character of the letter that conspires for the third and most vexatious element: Those who argue for the adoption of the exposure criteria in the 1986 NCRP report may seek justification on the grounds of surreptitious assault. Acceptance of this argument would be most unfortunate in my opinion because the 1992-IEEE-ANSI guides have a much larger data base, and they provide needed protections not anticipated or recognized in the formulations of the NCRP's SC-53.

Letter of 24 May 1996 to R. Cleveland, p. 2

There is an irony in the clandestine attempt to discredit the NCRP; ill-considered and patently erroneous assaults on ANSI have been circulated since the publication of ANSI standard C95-IV in 1982. The assaults have continued in the wake of publication of the 1992 IEEE-ANSI standard. Although not without flaws--e.g., confusing and contradictory passages in its *Rationale*--the 1992-IEEE-ANSI guides on the whole are clearly superior to the guidance offered in 1982 by the NCRP. I have little doubt that a poll of the RF-knowledgeable physicians, scientists, and engineers in the academic community would agree with my assessment.

I think it is time for a properly constituted panel of experts to be called before a responsible congressional committee to define, examine, and compare the respective roles, membership, and obligations of the NCRP and the ANSI as arbiters of RF exposure standards and their underlying criteria. I would appreciate any recommendations you may wish to make in identifying members of the U.S. House or Senate to whom one may address the need for a hearing. Needless to say in this time of political maneuvering and turmoil within the beltway, a propitious date for a hearing probably would be early during the new year--after the November elections and year-end holidays. In the mean time, please accept this letter as a strong endorsement by me of the 1992 IEEE-ANSI guides as proposed in the Telecommunications Act signed recently by President Clinton.

Yours truly,



Copy to: Dr. Osepchuk

VITA

Don R(ober) Justesen

Addresses:

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Grandview MO 64030
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Birth: 8 March 1930, Salt Lake City, Utah

Married: 1958, to Patricia Ann Larson: 2 Daughters, 2 Sons

SSN: 528-32-3151

Higher Education

University of Utah: B.A. (1955), M.A. (1957), and Ph.D. (1960); all majors in psychology (experimental and physiological); all minors in philosophy (emphasis on philosophy of science and logic).

Academic Appointments

- 1959 - 1962 Assistant Professor and Chairman, Department of Psychology, Westminster College, Salt Lake City, Utah
- 1963 - 1975 Lecturer (1963-1966), Associate Professor (1966-1968), and Professor of Psychology (1968-1975), University of Missouri at Kansas City
- 1965 Visiting Professor of Psychology, University of Colorado
- 1963 - Pres. Assistant Professor (1963-1966), Associate Professor (1966-1971), Professor of Psychiatry (Neuropsychology) (1971-), University of Kansas School of Medicine, Kansas City KS
- 1964 - 1990 Member of the Graduate Faculty, University of Kansas, Lawrence KS

Professional Training and Activities

- 1948 - 1952 Aviation Electronics Technician (Microwave Specialist), U.S. Navy (honorably discharged as Petty Officer 1/C)
- 1955 - 1956 Field Service Engineer, Rocky Mountain Region, Zenith Radio (later Electronics) Corporation
- 1962 - 1968 LTjg to LTsg, Ready Reserve, Medical Service Corps, U.S. Navy
- 1962 - 1995 Director, Neuropsychology and Behavioral Radiology Research Laboratories, USVA Medical Center, Kansas City, Missouri
- 1969 - 1976 Consultant to National Aeronautics and Space Administration (Behavioral Effects of Vibration)
- 1970 - 1995 Editorial Consultant to *Science* (Electromagnetic Waves, Neuropsychology, Psychopharmacology)
- 1972 - 1975 Member, EMR Advisory Group (Biological Effects of Non-Ionizing Electromagnetic Radiation), Bureau of Medicine and Surgery, U.S. Navy

¹ Application pending for appointment as *Professor Emeritus*

Professional Training and Activities [Continued]

- 1973 - 1989 Member, Technical Activities Committee on Man and Radiation (COMAR), Institute of Electrical and Electronics Engineers; Chairman *Pro Tem*, 1978; Chairman, 1979-1980; Past Chairman, Member of Executive Committee, 1981-1982
- 1975 - 1988 Associate Editor for Biology, *Journal of Microwave Power and Electromagnetic Energy*
- 1976 - 1990 Member, Subcommittee C95.1-IV, American National Standards Institute (ANSI: Safety Levels with Respect to Human Exposure to Radio-Frequency Electromagnetic Fields, 300 kHz to 100 GHz). Chairman, Biological Effects Validation Committee, 1983-1989.
- 1977 - 1995 Member, Scientific Committee 53 (Biological Effects of Non-Ionizing Electromagnetic Radiation) of the National Council on Radiation Protection and Measurements (NCRP)
- 1977 - 1994 Senior Member, Institute of Electrical and Electronics Engineers
- 1977 - 1979 Co-Editor (Biology), *Radio Science: Special Supplements on Biological Effects of Electromagnetic Waves*
- 1978 - 1979 Member, *Ad Hoc* Advisory Committee on Non-Ionizing Electromagnetic Radiation, U.S. Office of Science and Technology Policy (OSTP), Executive Office of the President
- 1978 - 1979 Member, Panel on Evaluation of Biological Effects of Microwave Radiation (PAVE PAWS Radar), National Academy of Sciences
- 1978 - 1980 Member, Advisory Panel on Microwave Radiation in Relation to the Solar Satellite Power System, Environmental Protection Agency and Department of Energy
- 1979 - 1983 Member, Editorial Board, *Bioelectromagnetics*
- 1983 - 1986 Member, Board of Directors, The Bioelectromagnetics Society
- 1985 - 1987 Member, Advisory Committee on Electric and Magnetic Fields, Electric Power Research Institute (EPRI)
- 1988 - 1993 Editor-in-Chief, *Bioelectromagnetics*
- 1988 - 1994 Member, Life Science Panel, National Academy of Sciences
- 1993 - Pres. Editor Emeritus, *Bioelectromagnetics*
- 1994 - Pres. Member, Peer-Review Panel on Wireless Technology, Center for Risk Analysis, Harvard University's School of Public Health, Boston MA
- 1995 - Pres. Member Scientific Committee 89.4 of NCRP, Evaluation of Modulation as a Risk Factor in Exposure to RF Radiations

Professional Societies, Past and Present

American Psychological Association (APA), (Divisions of Experimental, Physiological, and Psychopharmacology); American Psychological Society (APS); Bioelectromagnetics Society; British Society for Philosophy of Science; Institute of Electrical and Electronics Engineers (IEEE); Psychonomic Society; Society for Neuroscience

Research Activities

The primary efforts involved experimental study of behavioral and electrophysiological influences of non-ionizing electromagnetic fields. Specific projects involved evaluation of stimulus properties of microwave or shortwave radiations, behavioral and physiological sequelae of such radiations, and their application to small-animal models and human beings as a modality to prevent or mitigate hypothermia. In addition, experimental work on small mammals was conducted to evaluate behavioral and physiological effects of exposure to nominally static and time-varying magnetic fields at extremely low-frequencies.

Awards and Honors

- 1958 Membership, Sigma Xi and Psi Chi
- 1958 USPHS Predoctoral Research Fellow
- 1960 Ph.D. awarded "With Distinction"
- 1962 *Professor of the Year*, Westminster College
- 1968 First Cash Prize for Research in Psychopharmacology, American Psychological Association
- 1970 Fellow, American Psychological Association
- 1971 Fellow, American Association for the Advancement of Science
- 1976 Member, Commission A (Electromagnetic Metrology), through the U.S. National Committee, National Academy of Sciences, of the International Union of Radio Science (URSI).
- 1977 Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
- 1977 Board of Governors, International Microwave Power Institute
- 1978 Keynote Speaker for the United States, National Academy of Sciences' Delegate, XIXth General Assembly of the International Union of Radio Science (URSI), Helsinki, Finland
- 1979 Chairman, Committee on Man and Radiation (COMAR), Institute of Electrical and Electronic Engineers
- 1980 Research Career Scientist, U.S. Department of Veterans Affairs
- 1983 Vice President (1983-84), President (1984-85), Past President (1985-86), Bioelectromagnetics Society
- 1988 Editor-in Chief, *Bioelectromagnetics*
- 1991 Fellow, American Psychological Society

Archival Biographies, Marquis, Inc.

Who's Who in Frontier Science and Technology
Who's Who in America

Intramural Support

- 1962 - 1995 Continuous support as Principal Investigator, Medical Research Service, U.S. Department of Veterans Affairs

Extramural Support, Grants and Contracts

- 1967 - 1971 DADA-17-68-8201, In support of microwave research, Advanced Research Projects Agency (ARPA), via the Surgeon General, U.S. Army, \$128,000
- 1973 - 1976 1-RO1-RL000678, In support of microwave research, Bureau of Radiological Health, USPHS, \$140,000
- 1976 - 1980 4-RO1-FD00650, In support of microwave research, Bureau of Radiological Health, USPHS, \$217,000
- 1980 - 1986 1-RO1-ES02615, In support of microwave research, National Institute of Environmental Health Sciences, \$553,000
- 1982 - 1983 Inter-Agency Award in support of microwave research, Office of Naval Research, \$27,000
- 1988 - 1990 Joint VA/DoD Award in support of research on hypothermia, \$130,000

LIST OF PUBLICATIONS

Texts, Chapters, Reviews, Editorials

- Justesen, D.R. (1970). Experimental neuropsychology: The basic science of psychiatry. *International J. Social Psychiatry*, 16, 190-195.
- Justesen, D.R., Braun, D.W., Garrison, R.G., and Pendleton, R.B. (1971). Pharmacological differentiation of allergic and classically conditioned asthma in the guinea pig. In C.L. Sheridan (Ed.), *Readings for experimental psychology* (pp. 251-260). New York: Holt, Rinehart & Winston.
- Justesen, D.R. (1975). Introduction: Effects [of microwave radiation] on behavior. *Annals New York Academy of Sciences*, 247, 408-409.
- Justesen, D.R. (1975). Microwaves and behavior. *American Psychologist*, 30, 391-401.
- Justesen, D.R. (1975). Toward a prescriptive grammar for the radiobiology of non-ionising electromagnetic radiations: Quantities, definitions, and units of absorbed electromagnetic energy. *J. Microwave Power*, 10, 333-356.
- Justesen, D.R. (1977). Operant and respondent properties of the tongue-licking response of the rodent. In J.A.W.M. Weijnen and J. Mendelson, (Eds.), *Drinking behavior: Oral stimulation, reinforcement and preference* (pp. 115-155). New York: Plenum Press.
- Justesen, D.R. (1977). Diathermy versus the microwaves and other radio-frequency radiations: A rose by another name is a cabbage, *Radio Science*, 12, 355-364. [Reprinted in *U.S. Senate Hearings Record, Committee on Commerce, Science and Transportation, Ser. No. 95-49*, Washington DC: U.S. Government Printing Office.]
- Justesen, D.R., and Guy, A.W. (Eds.) (1977). Special issue on biological effects of electromagnetic waves (pp. 1-293), *Radio Science*, 12/6S.
- Justesen, D.R., and Guy, A.W. (1977). Editorial: A new radiobiology is coming of age but faces an uncertain future, *Radio Science*, 12/6S, i-ii.
- Justesen, D.R., and Süsskind, C. (1978). Review [of Paul Brodeur's 1977 text: *The zapping of America: Microwaves, their deadly risk, and the cover-up*; published in New York by Norton]. *IEEE Spectrum*, 15, 60-63.
- Justesen, D.R., Ragan, H. A., Rogers, L.E., Guy, A. W., Hjerresen, D.L., Hinds, W.T., and Phillips, R.D. (1978). *A selective review of the literature on biological effects of microwaves in relation to the satellite power system, PNL-2634 [Rev.]* (pp. 1-80). Washington DC: Dept. of Energy.
- Guy, A.W., and Justesen, D.R. (1979). *Research on health effects of non-ionizing radiation, Hearing Record No. 70, Committee on Science and Technology, U.S. House of Representatives, 96th Congress* (pp. 37-38, 108-112). Washington DC: U.S. Gov't. Printing Office.
- Justesen, D.R. (1979). Microwave hazards, *IEEE Spectrum*, 16, 67-68.
- Justesen, D.R. (1979). Discussion: The blood-brain barrier, cerebral circulation, and mathematical modeling. *Radio Science*, 14/6S, 351.
- Justesen, D.R. (1979). *Microwave radiation from a biological perspective* (pp. 1-5). El Segundo CA: Electronic Conventions Incorporated.
- Justesen, D.R. (1979). Behavioral and psychological effects of microwave radiation, *Bulletin of the N.Y. Academy of Medicine*, 55, 1058-1078.
- Justesen, D.R. (1979). The committee on man and radiation: A commitment to the public interest, *Bull. N.Y. Acad. of Medicine*, 55, 1267-1273.
- Justesen, D.R., and Baird, R.C. (Eds.) (1979). Special issue on biological effects of electromagnetic waves, *Radio Science*, 14/6S, 1-352.
- Justesen, D.R., and Baird, R.C. (1979). Editorial: The passing of a giant, the changing of the guard. *Radio Science*, 14/6S, i.
- Justesen, D.R., Guy, A.W., Osepchuk, J.M., Sutton, C.H., and Hunt, E.L. (1979). Scientific, technological, and sociological implications of research on biological effects of radio-frequency electromagnetic radiations. *Proceedings: 1978 Technological Policy Conference* (pp. 61-70). Washington DC: Institute of Electrical and Electronics Engineers.

Texts, Chapters, Reviews, Editorials [Continued]

- Chou, C.-K., Guy, A.W., Foster, K.R., Galambos, R., and Justesen, D.R. (1980). Holographic assessment of microwave hearing. *Science*, 209, 1143-1144.
- Justesen, D.R. (1980). Microwave irradiation and the blood-brain barrier. In O.P. Gandhi (Ed.), Special issue on biological effects and medical applications of electromagnetic energy (pp. 60-67). *Proceedings of the IEEE*, 68, 60-67.
- Justesen, D.R. (1982). Scientific and hygienic issues in biological research on microwaves: Toward rapprochement between East and West. *Radio Science*, 17/5S, 1-12.
- Justesen, D.R. (1982). Dealing with terminology and values: Risk versus harm analysis in the formulation of protective standards. In N.H. Steneck (Ed.), *Risk/benefit analysis: The microwave case* (pp. 159-165). San Francisco: San Francisco Press.
- Justesen, D.R. (1983). Behavioral and neurological effects of microwave radiation. In J.O. Osepchuk (Ed.), *Biological effects of microwave radiation* (pp. 175-217). New York: John Wiley & Sons.
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- Justesen, D.R. (1984). Perception and personal control as factors in the functional and systemic response to microwave radiation. *Proceedings: US-USSR workshop on nervous system effects of electromagnetic waves* (pp. 14-40). Research Triangle Park NC: National Institute of Environmental Health Sciences.
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- Justesen, D.R., and Guy, A.W. (1985). Arsene Jacques d'Arsonval: A brief history. *Bioelectromagnetics*, 6, 111-114.
- Justesen, D.R., and Smith, R.F. (1985). Biological sensitivity to low-frequency magnetic fields. In *Electric energy systems research* (pp. 244-258). Washington DC: National Academy Press.
- Justesen, D.R. (1986). Herman P. Schwan: 1985 recipient of the d'Arsonval Medal. *Bioelectromagnetics*, 7, 109-111.
- Justesen, D.R., Peters, J.M., Sahl, J.D., Sheppard, A.R., Smith, R.F., and Wright, W.H. (1986). *A critical review of the scientific literature on low-frequency electromagnetic fields: Assessment of effects on human health and recommendations for research* (150+ pp). Rosemead, California: West Associates.
- Justesen, D.R. (Scientific Editor) (1986). Biological effects and exposure criteria for radio-frequency electromagnetic fields. *NCRP Report No. 86* (382 pp). Bethesda MD: National Council on Radiation Protection and Measurements.
- Justesen, D.R. (1988). Arthur W. Guy: 1987 Recipient of the d'Arsonval medal. *Bioelectromagnetics*, 9, 109-111.
- Justesen, D.R. (1989). Protection guides for RF radiations: Recent developments in the U.S.A. In J.C. Lin, Ed. (pp. 215-219), *Electromagnetic interaction with biological systems*. New York: Plenum Press.
- Justesen, D.R. (1990). In retrospect (editorial). *Bioelectromagnetics*, 11, 101-102.
- Justesen, D.R. (1992). Theoretical controversy and reconciliation (editorial). *Bioelectromagnetics*, 13, 1-2.
- Justesen, D.R. (1992). Instrumentation as an art form. *Bioelectromagnetics*, 13, 599-600.
- Justesen, D.R. (1994). Editor's Note on the *Open peer review* of W. F. Pickard's "Trivial influences: A doubly stochastic Poisson process model permits detection of arbitrarily small electromagnetic signals." *Bioelectromagnetics*, 16:1.

Original Research: Articles and Reports

- Justesen, D.R., Pendleton, R.B., and Porter, P.B. (1961). Effects of [microwave-induced] hyperthermia on activity and learning. *Psychological Reports*, 9, 99-102.
- Justesen, D.R., and Bourne, L.E., Jr. (1963). A comparison of grouped and paired associates in serial verbal learning. *J. General Psychology*, 69, 163-168.
- Justesen, D.R., Sharp, J. C., and Porter, P.B. (1963). Self-stimulation of the caudate nucleus by instrumentally naive cats. *J. Comparative and Physiological Psychology*, 56, 371-374.
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- Justesen, D.R., Levinson, D. M., and Daley, M. (1967). A modification of the Hulse lick-erandum: Preliminary studies and suggested applications. *Psychonomic Science*, 7, 111-112.
- Bourne, L.E., Jr., Dodd, D.G., Guy, D.E., and Justesen, D.R. (1968). Response-contingent intertrial intervals in concept identification. *J. Experimental Psychology*, 76, 601-608.
- Nielson, H.C., Justesen, D.R., and Porter, P.B. (1968). Effects of anticonvulsant drugs upon patterns of seizure discharge and brain thresholds: Some implications for memory mechanisms. *Psychological Reports*, 23, 843-850.
- Justesen, D.R., Brauchi, J.T., Dodd, D.H., Sheridan, C.L., and Bourne, L.E., Jr. (1969). Attenuation of retroactive inhibition by a single electroconvulsive shock. *Psychonomic Science*, 17, 43-45.
- King, N.W., Justesen, D.R., and Simpson, A.D. (1970). The photo-lickerandum: A device for detecting the licking response, with capability for near-instantaneous programming of variable-quantum reinforcement. *Behavior Research Methods & Instrumentation*, 2, 125-129.
- Justesen, D.R., and King, N.W. (1970). Behavioral effects of low-level microwave irradiation in the closed-space situation. In S.F. Cleary (Ed.), *Symposium on biological effects and health implications of microwave radiation, No. BRH/DBE 70-2* (pp.154-179). Rockville MD: USPHS.
- Justesen, D.R., Braun, E.W., Garrison, R.G., and Pendleton, R.B. (1970). Pharmacological differentiation of allergic and classically conditioned asthma in the guinea pig. *Science*, 170, 864-866.
- Brizzee, K.R., Justesen, D.R., and King, N.W. (1971). Microwaves and density of brain cells. In P.E. Tyler (Ed.), *Proceedings: Dept. of Defense Electromagnetic Workshop* (pp. 353-360). Washington DC: U.S. Navy Bureau of Medicine and Surgery.
- Brizzee, K.R., Justesen, D.R., Kriegel, H., and Sharp, J.C. (1971). Cytokinetic effects of microwave irradiation. In P.E. Tyler (Ed.), *Proceedings: Dept. of Defense Electromagnetic Workshop* (pp. 350-352). Washington DC: U.S. Navy Bureau of Medicine and Surgery.
- Justesen, D.R. (1971). Technical note: Allergic and classically conditioned asthma in guinea pigs. *Science*, 173, 82.
- Justesen, D.R., King, N.W., and Clarke, R.L. (1971). Unavoidable gridshock without scrambling circuitry from a faradic source of low-radio-frequency current. *Behavior Research Methods & Instrumentation*, 3, 131-135.
- Justesen, D.R., Levinson, D.M., Clarke, R.L., and King, N.W. (1971). A microwave oven for behavioural and biological research: Electrical and structural modifications, calorimetric dosimetry, and functional evaluation. *J. Microwave Power*, 6, 237-258.
- King, N.W., Justesen, D.R., and Clarke, R.L. (1971). Behavioral sensitivity to microwave irradiation. *Science*, 172, 398-401.

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- Justesen, D.R., Levinson, D.M., and Justesen, L.R. (1974). Psychogenic stressors are potent mediators of the thermal response to microwave radiation. In P. Czerski, et al. (Eds.), *Proceedings, international symposium on biological effects and health hazards of microwave radiation* (pp. 134-140). Warsaw: Polish Medical Publishers.
- Oke, A.F., Mendelson, J., and Justesen, D.R. (1974). Cortical hypothermia is a sequela of electroconvulsive shock. *Nature*, 248, 437-439.
- Chernovetz, M.E., Justesen, D.R., King, N.W., and Wagner, J.E. (1975). Teratology, survival, and reversal learning after fetal irradiation by 2450-MHz microwave energy. *J. Microwave Power*, 10, 391-409.
- Bourne, L.E., Jr., Justesen, D.R., Abraham, T., Beeker, C., Brauchi, J.T., Whitaker, L.C., and Yaroush, R.A. (1977). Limits to conceptual rule-learning by schizophrenic patients. *J. Clinical Psychology*, 33, 325-334.
- Chernovetz, M.E., Justesen, D.R., and Oke, A.F. (1977). A teratological study of the rat: Microwave- and infrared-radiations compared. *Radio Science*, 12/6s, 191-197.
- Justesen, D.R., and Bruce-Wolfe, V. (1977). Microwave hyperthermia and the visually evoked potential: Preliminary observations on the guinea pig. *Proceedings of the symposium on biological effects and measurement of RF/microwaves, No. FDA 77-8206* (pp. 54-61). Washington DC: USPHS.
- Putthoff, D.L., Justesen, D.R., Ward, L.B., and Levinson, D.M. (1977). Drug-induced ectothermia in small animals: The quest for a biological microwave dosimeter. *Radio Science*, 12/6s, 73-80.
- Smith, R.F., and Justesen, D.R. (1977). Effects of a 60-Hz magnetic field on activity levels of mice. *Radio Science*, 12/6s, 279-285.
- Levinson, D.M., Sheridan, C.L., Hottman, T.J., Justesen, D.R., Creel, D.J., and Sanders, R.D. (1978). Assessment of the contact eye-cover as an effective method of restricting visual input. *Behavior Research Methods & Instrumentation*, 10, 376-388.
- Preskorn, S.H., Edwards, W.D., and Justesen, D.R. (1978). Retarded tumor growth and augmented longevity in mice after fetal irradiation by 2450-MHz microwaves. *J. Surgical Oncology*, 10, 483-492.
- Bermant, R.I., Reeves, D.L., Justesen, D.R., and Levinson, D.M. (1979). Classical conditioning of microwave- and shock-induced hyperthermia in the rat. *Radio Science*, 14/6s, 201-207.
- Bruce-Wolfe, V., and Justesen, D.R. (1979). Microwave-induced hyperthermia and the visually evoked electrocortical response of the guinea pig. *Radio Science*, 14/6s, 187-191.
- Chernovetz, M.E., Justesen, D.R., and Levinson, D.M. (1979). Acceleration and deceleration of fetal growth of rats by 2450-MHz radiation. In S. Stuchly (Ed.), *Proceedings, 1979 symposium on electromagnetic fields in biological systems* (pp. 175-193). Ottawa: International Microwave Power Institute.
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Original Articles and Reports [Continued]

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